A MATTER OF SCALE

Research plan

Silva Haarbosch | 5638895 | 10.11.2023

GRADUATION STUDIO

A Matter of Scale

Architecture for the European City Tallinn, Estonia
Mathods of Analysis & Imagination
Fall 2023

Aleksandar Stanicic
A.Stanicic@tudelft.nl

Eric Crevels
E.FerreiraCrevels@tudelft.nl

Willie Vogel
Willie.C.Vogel@gmail.com

Silva Haarbosch
5638895
S.L.Haarbosch@student.tudelft.nl

Master Architecture
Technische Universiteit Delft

Version: Final
November 10th 2023

INDEX

Ütle meri, mu meri

Merel puhumas on tuuled
tuuled need on trotsi täis.
Kas mind suudlesid su huuled
või ehk tuul neist üle käis?

Ütle meri, mu meri
miks sa siia mu tõid?
Ütle meri, mu meri
kas ma lahkuda võin?

Mere kohal särab taevas
taevas see on tähti täis.
Palju tähti alla langes
palju rohkem alles jäi.

Ütle meri, mu meri
miks sa siia mu tõid?
Ütle meri, mu meri
kas ma lahkuda võin?

Mere kaldal liivaluited
luited need on jälgi täis.
Kes need jäljed siia jättis
kes neid jälgi mööda käis?

Ütle meri, mu meri
miks sa siia mu tõid?
Ütle meri, mu meri
kas ma lahkuda võin?

Merevetel sõitvad laevad
palju laevu merre jäi.
Mere kohal särab taevas
taevas see on tähti täis.

Ütle meri, mu meri
miks sa siia mu tõid?
Ütle meri, mu meri
kas ma lahkuda võin?

- Vello Orumets

1 Research Introduction

A matter of scale

The coastal landscape of Tallinn, Estonia's capital, has undergone significant shifts in the 19th and 20th centuries, evolving into an industrial and port-centric zone. The ambitious project 'Greater Tallinn,' envisioned by Eliel Saarinen in 1912, further solidified this vision by establishing an enclosed port area along the coast. The maritime importance of Tallinn was underscored during the Soviet era when it hosted the sailing event of the Olympics in 1980 in Pirita. In the post-Soviet era, the concept of revitalizing Tallinn as a vibrant coastal city gained momentum. In 2007, the city approved the urban development plan 'Opening Tallinn up to the sea,' aiming to restore the connection between the city and its coastal front.

For years, the connection between Tallinn's city centre to the sea was limited and controlled by the Soviet government, which curtailed public access to the coastline and waterfront areas. "In the 19th and 20th century, the seafront was allocated to industrial and harbour buildings rather than lively city streets" (MAJA - Estonian Architecture Review, 2022). It was a symbolic and physical manifestation of the centralized planning and control that characterized the Soviet regime (Ruudi, n.d.). But since 2007 the urban development plan called 'Opening Tallinn up to the sea' has been observed, it is up to urban planners and architects to act accordingly. Partly due to the Olympic sailing event in 1980, Tallinn has become a centre for water sports. Many residents of Tallinn finds their physical exercise, mental reflection and happiness while practising a water sport.

While Tallinn's coastal transformation is sort of well-documented, there is a gap in our understanding regarding the potential socio-cultural and urban implications of establishing a water sports centre, as well as what exactly a water sports association is. This gap represents a critical deficiency. This research aims to bridge this gap and provide fresh insights into how a water sports centre can not only optimize the coastal area but also serve as a catalyst for physical engagement and social cohesion.

Recognizing the need to enhance the city-sea connection and offer increased water sports opportunities, the concept of designing a water sports centre emerges. The central research question guiding this proposal is as follows: "How can the development of a water sports centre improve the coastal zone, fostering physical activity and social interaction in Tallinn?"

I believe this research is essential for several reasons. Firstly, it aligns with Tallinn city council's vision of 'opening Tallinn up to the sea,' contributing to the realization of a long-standing urban development goal. Secondly, it has the potential to elevate the quality of life for Tallinn's residents, offering new avenues for leisure and personal development, particularly for the city's youth. It aspires to provide extracurricular activities for the young generation, imparting crucial life skills such as independence, resilience, and the value of leisure activities. Additionally, the findings from this research may have broader applications in urban planning and coastal development projects in other regions.

To address the main research question effectively, firstly the following sub-questions will be explored:

1. What are the critical considerations regarding the location of the water sports centre within the coastal zone?
2. What defines a water sports centre and how can it be integrated with a broader social function to ensure inclusivity?
3. What current initiatives in Tallinn focus on fostering social interaction among its residents?

The problem statement, as articulated above, will be investigated using diverse research methods, which will be elaborated upon in Chapter Two. Chapter Three will provide a comprehensive overview of the theoretical framework and the pertinent bibliographic sources. Chapter four contains a reflection on the broader relevance while Chapter Five will visually present the various research objectives.

2 Methodological Positioning

A matter of scale

WHY?

There is a need to enhance the connection between the city and the sea, provide increased water sports opportunities, and align with Tallinn city council's vision of 'Opening Tallinn to the sea'.

WHO?

This project is relevant to a broad spectrum of stakeholders, mainly for the local residents, the city council, urban planners and architects.

WHAT?

An water sports centre to improve the coastal zone and fostering physical and social interaction in Tallinn.

RC : How can the development of a water sports centre improve the coastal zone, fostering physical activity and social interaction in Tallinn?

WHERE?

A. Site Visits
observation + photography

1. Pikakari Rand
2. Paljassaare - Hundipea
3. Noblessner - Lennusadam
4. Kalaturg
5. Guest Harbour
6. Kadriorg Beach
7. Stroomi Beach
8. Kopli
9. Paljassaare Hoiuala

B. Findings
analyse + documentation + conclude

THEORY

A Matter Of Scale
micro / macro scale

C. Bibliography
readings

References
precedence studies

D. Reflection + Conclusion
select + summarize

E. Program of Requirements
define a final P.o.R

E. Program of Requirements
define a final P.o.R

F. Location Filter/Funnel
compare + test

G. Choose Project Location

Done
Doing
To Do

START DESIGN PROCES

2 Methodological Positioning

A matter of scale

In this chapter, the methodological position adopted for this study on the development of a water sports centre in Tallinn, focusing on the coastal zone and harbour areas is explained. A multi-faceted approach is devised. A approach that encompasses on-site visits, extensive bibliographic research, reference project (precedence studies), the definition of a program of requirements, and a comparative assessment of nine locations to narrow down to two or three optimal sites and eventually one site. What will become the project location for the development of the water sports centre.

First the methodological position on the scheme will be explained, whereafter also the methods that will be used to answer the sub-questions will be explained.

A. On-site visits

During our visit to Tallinn, nine potential project locations were visited. The core of this methodological approach is to, by observation and photography, understand the physical environment and the unique features of each coastal location.

B. Findings

By documenting the information obtained during the site visits, the findings will become visible. This marks the initial action in testing the applicability of the locations. The information will be documented by two-dimensional drawings, which must contain the following themes: access and circulation, orientation, utilities and infrastructure, noise and pollution, public and private spaces, views and vistas. In addition, the SWOT methodology will be used to define the Strengths, Weaknesses, Opportunities and Threats of the nine individual locations.

C. Bibliography & References

By studying various existing literature and reference projects related to coastal development, urban plans, water sports centres, and other social functions, I hope to gain a better understanding of both the city and the purpose of the project under development (project proposal). This process will contribute to identifying the challenges and opportunities related to the (to be) proposed water sports centre. The selected reference projects, used for precedence studies, will be addressed in the theoretical framework. The precedence studies will obtain a comparison on how the themes, mentioned in action B, are presented in the refence projects. The readings and precedence studies should take in account both the micro as macro scale. The micro scale will focus mainly on research to users comfort, users flow and equipment. The macro scale will focus on urban planning, connectivity, functions and activities.

After completing action C, I hope to be able to answer the following sub-questions: “What defines a water sports centre and how can it be integrated with a broader social function to ensure inclusivity?” and “What current initiatives in Tallinn focus on fostering social interaction among its residents?”.

D. Reflection & conclusion

The most important information obtained from the bibliography and references will be gathered and summarized. Findings on the precedence studies will be displayed in two-dimensional drawings.

After completing action D, I hope to be able to answer the following sub-question: “What are the critical considerations regarding the location of the water sports centre within the coastal zone?”

E. Define a Program of Requirements

The information summarized from the bibliography and references will be transformed into a program of requirements. The program of requirements will outline the facilities, functions, and specifications necessary to meet the needs of the water sports centre, Tallinn’s residents, promote physical activity, and encourage social interaction. The Program of Requirements will

be indicated textually with when necessary clarifying pictures, symbols and/or graphs. Action E, forms the foundation for the subsequent phases of the research.

F. Location Filter/Funnel

With data collected through site visits, an extensive review of the city's literature, and references from similar projects, a comparative assessment of the nine locations will be conducted. The goal is to, for each location, assess their suitability in relation to the program of requirements.

G. Choose Project Location

All prior actions will narrow the selection of locations down to the final site. The design process which can now be related to the final location of the water sports centre can start.

I would like to emphasise the finding of the final project location does not conclude the research process. In my opinion, doing research and designing are two processes that run simultaneously side by side and even result in an optimal outcome in cooperation with each other. This also means that a step back in the design process may occur as a result of findings during research or that the design process is put on hold because more information needs to be provided first.

3 Theoretical framework

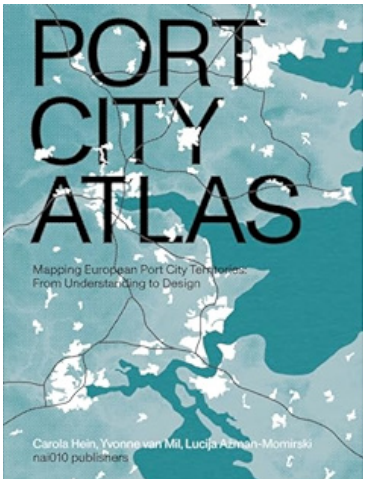
A matter of scale

MAJA – Estonian Architecture Review provides insight in the “Opening Tallinn up to the sea” project, offering a local perspective on coastal development. The magazine incorporates concepts of (sustainable) urban development, examining how the project aligns with Tallinn’s historical context and modern urban planning principles. Emphasis is placed on the intersection of architectural design and environmental considerations, aiming to uncover the theoretical underpinnings that guided the development of Tallinn’s coastal zone.

Port City Atlas written by Carola Hein serves as a valuable resource for visualizing and designing the geography of the European port cities. The book is an outcome of extensive efforts to raise awareness of maritime flows across sea and land, through ports, cities, and territories and contains the available data from the European Commission. It reveals the complexity and fragility of land-sea ecosystems. Subjects as Port city territories in the past, present and future but also the question of how mapping can help to better understand port city territories are addressed. This book provides informative maps and statistics for all the European port cities.

The Dutch source, “Gebruik en Inrichting van Watersportgebieden”, focuses on the use and layout of water sports areas. The framework incorporates principles of recreational planning, exploring how water sports areas enhance the urban fabric. Concepts such as user engagement, spatial design, and the integration of water-based recreational activities within urban planning are central to the theoretical lens. The historical context of the 1980s contributes to understanding evolving perspectives on water-based recreation.

1.



2.

3.

1. MAJA - Estonian Architecture Review. (2022). Opening Tallinn Up To The Sea. Väljaandja.
2. Hein, C. (2023). Port City Atlas. nai010.
3. Van Der Voet, J., & Smit, J. (1982). Gebruik en inrichting van watersportgebieden.

3 Theoretical framework

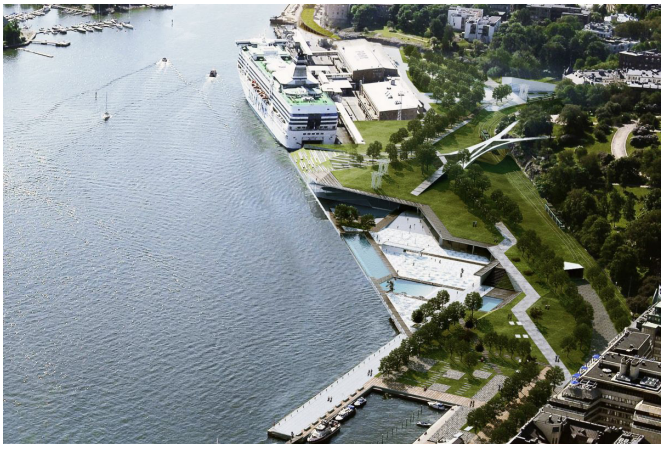
A matter of scale

The Helsinki coastal zone development is an example of small and big interventions working together to reach the set goal for 2030. The Helsinki Maritime Strategy has three main focuspoints. 1. Helsinki is an attractive and functional sea City; 2. Maritime services and recreational possibilities are available to everyone; 3. Helsinki treasures its sea nature. Furthermore, other urbanism related precedence might be introduced and analysed in this research (Helsinki Maritime Strategy, 2019). Same goes for the following water sports centre project.

Formentera Water Sports Centre is a project situated in La Savina, Spain, designed by Marià Castelló Martinez and was completed in 2019. The water sports centre has a total floor area of 345 square metres and is located by the salt water lake that is part of Ses Salines Natural Park.

The Water Sports Centre Halsskov was designed repurposed old shipping containers. Swecco Architects designed this project focussing on environmental sustainability and playful interactions. This project emphasizes the site's raw character such a small object can make a huge difference in public space usage.

In comparison to the size of the two projects mentioned above, Water Sports Centre SIMAC is a large project being part of an urban development. The urban project is in total 5,5 hectares. The Sports Centre itself is 12.500 square metres. The building houses functions as teaching rooms, auditoriums, simulator centre, laboratories, storage spaces, and so on.



Masterplan of the south port
Part of a bigger masterplan
WeMakeSpaces Architects
Helsinki, Finland

Formentera Water Sports Center
Marià Castelló Martínez
La Savina, Spain
2019, 345 m²

Water Sports Center Halsskov
Sweco Architects
Korsør, Denmark
2017

SIMAC
Effekt
Svendborg, Denmark
2019, 12.500 m²

4 Reflection on broader relevance

A matter of scale

The dynamic and evolving coastal zone of Tallinn provides a compelling backdrop, and the findings from this research can have far-reaching relevance and applications in multiple dimensions.

First and foremost, this project aligns intimately with Tallinn city council's vision of 'Opening Tallinn up to the sea'. This alignment contributes to the realization of a long-standing urban development goal. Attempting to optimize the coastal area through the establishment of a water sports centre contributes to the broader discourse on (sustainable) urban development and coastal regeneration. The approach of fostering physical activity and social interaction can potentially serve as a blueprint for other cities with similar aspirations.

Furthermore, the potential to enhance the quality of life for Tallinn's residents is a central tenet of this research. By offering more avenues for leisure and personal development nurturing a generation that will carry forward the virtues of the significance of leisure activities. These values are universally cherished and form the foundation of thriving, well-balanced societies. The findings of this research and products of this project can be seen as a contribution to the broader conversation on the role of recreational spaces and activities in enhancing the well-being of urban communities.

Finally, as I explore the critical considerations regarding the location of the water sports centre, define the essence of a water sports centre, and examine the initiatives for fostering social interaction, I would like to create a repository of knowledge. Creating this repository of knowledge involves systematically gathering and organizing information. The following topics will be observed by creating the repository: data collection, location analysis, essence of a water sports centre and social interaction initiatives. By implementing these topics, a well-organized repository of knowledge can be created. A repository that serves as a valuable resource for decision-making and future development of the water sport centre in Tallinn, and eventually other water sport centres.

In essence, this research, framed within the unique coastal landscape of Tallinn, resonates on a much broader scale. It stands as a testament to the universal importance of urban development, community engagement, and the role of leisure and recreational spaces in enriching lives. By bridging the gap in our understanding and providing fresh insights, this work may reach beyond Tallinn's shores, impacting the broader discourse on the sustainable, liveable, and connected cities of the future.

Bibliography
A matter of scale

Hein, C. (2023). Port City Atlas. nai010.

Helsinki Maritime Strategy. (2019). Helsinki: Helsinki City Executive Office.

MAJA - Estonian Architecture Review. (2022). Opening Tallinn Up To The Sea. Väljaandja.

Ruudi, I. (n.d.). Tallinn urban visions of the transition era – from socialist trauma to neoliberalist mirage. Tallinn: Estonian Academy of Arts.

Van Der Voet, J. &. (1982). Gebruik en Inrichting van Watersportgebieden.

Say sea, my sea

The winds are blowing on the sea
winds that are full of defiance.
Have I been kissed by your lips
Or was it the wind that passed over them?

Say sea, my sea
why did you bring me here?
Say sea, my sea
Can I leave you?

Above the sea the sky is shining
The sky is full of stars.
Many stars fell down
Many more remained.

Say sea, my sea
why did you bring me here?
Say sea, my sea
Can I leave you?

Sand dunes by the sea
The dunes are full of tracks.
Who left these tracks here
who walked these tracks?

Say sea, my sea
why did you bring me here?
Say sea, my sea
Can I leave you?

Ships sailing the seas
Many ships were left at sea.
Above the sea the sky shines
The sky is full of stars.

Say sea, my sea
why did you bring me here?
Say sea, my sea
Can I leave you?

- Vello Orumets

A Research plan

A matter of scale

PROBLEM STATEMENT

For years, the connection between Tallinn's city centre to the sea was limited and controlled by the Soviet government, which limited public access to the coastline and waterfront areas. Since 2007 the urban development plan called 'Opening Tallinn up to the sea' has been observed, it is up to urban planners and architects to act accordingly. In addition, according to Andrès Ojari, head of Architecture and Urban Planning Curriculum in Estonian Academy of Arts, there is an need of more water sport facilities as there is a queue for registration at Tallinn's largest water sports club, among others.

WHY?

There is a need to enhance the connection between the city and the sea, provide increased water sports opportunities, and align with Tallinn city council's vision of 'Opening Tallinn up to the sea'.

WHO?

This project is relevant to a broad spectrum of stakeholders, mainly for the local residents, the city council, urban planners and architects.

WHAT?

An water sports centre to improve the coastal zone and fostering physical and social interaction in Tallinn.

RC : How can the development of a water sports centre improve the coastal zone, fostering physical activity and social interaction in Tallinn?

WHERE?

A. Site Visits
observation + photography

1. Pikakari Rand
2. Paljassaare - Hundipea
3. Noblessner - Lennusadam
4. Kalaturg
5. Guest Harbour
6. Kadriorg Beach
7. Stroomi Beach
8. Kopli
9. Paljassaare Hoiuala

B. Findings
analyse + documentation + conclude

E. Program of Requirements
define a final P.o.R

F. Location Filter/Funnel
compare + test

G. Choose Project Location

THEORY

A Matter Of Scale
micro / macro scale

C. Bibliography
readings

References
precedence studies

D. Reflection + Conclusion
select + summarize

E. Program of Requirements
define a final P.o.R

Done
Doing
To Do

START DESIGN PROCES

B Site locations
A matter of scale

Potential site locations:

1. Pikakari Rand
2. Paljassaare - Hundipea
3. Noblessner - Lennusadam
4. Kalaturg
5. Guest Harbour
6. Kadriorg Beach
7. Pirita Harbour
8. Stroomi Beach
9. Kopli

B

1. Pikakari Rand

A matter of scale

B

2. Paljassaare - Hundipea

A matter of scale

B

3. Noblessner - Lennusadam

A matter of scale

B

4. Kalaturg

A matter of scale

B

5. Guest Harbour

A matter of scale

B

6. Kadriorg Beach

A matter of scale

B

7. Pirita Harbour

A matter of scale

B

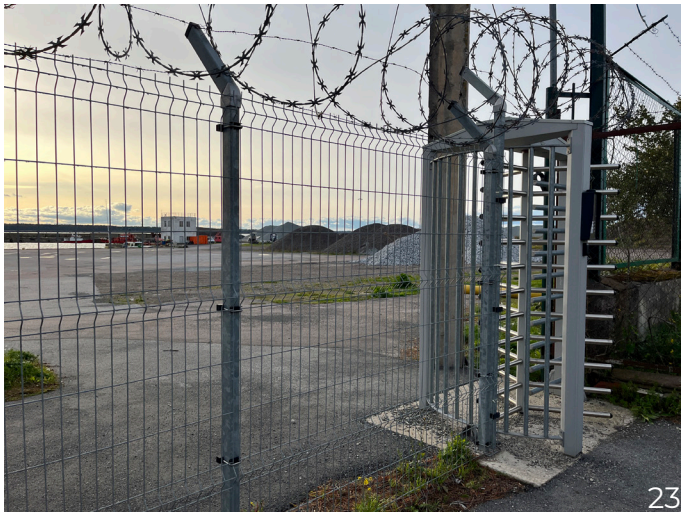
8. Stroomi Beach

A matter of scale

B

9. Kopli

A matter of scale



A MATTER OF SCALE

Research plan

Silva Haarbosch | 5638895 | 10.11.2023